

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
29 July 2004 (29.07.2004)

PCT

(10) International Publication Number
WO 2004/063219 A1

(51) International Patent Classification⁷: **C07K 14/47**,
C12N 15/12, G01N 33/566, C12Q 1/68, A61K 38/17,
A01K 67/027

(21) International Application Number:
PCT/GB2004/000101

(22) International Filing Date: 13 January 2004 (13.01.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0300718.4 13 January 2003 (13.01.2003) GB

(71) Applicant (for all designated States except US): **ARES TRADING S.A.** [CH/CH]; Chateau de Vaumarcus, CH-2028 Vaumarcus (CH).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **FAGAN, Richard, Joseph** [US/GB]; Impharmatica Limited, 60 Charlotte Street, London W1T 2NU (GB). **MICHALOVICH, David** [GB/GB]; Impharmatica Limited, 60 Charlotte Street, London W1T 2NU (GB). **WHITE, Simon, John**

[GB/GB]; Impharmatica Limited, 60 Charlotte Street, London W1T 2NU (GB). **POWER, Christine** [GB/FR]; 10, rue des Jonquilles, 01710 Thoiry (FR). **YORKE, Melanie** [GB/CH]; 20a Chemin de Vuillonex, CH-1232 Confignon (CH).

(74) Agents: **GOODFELLOW, Hugh, Robin** et al.; Carpmaels & Ransford, 43-45 Bloomsbury Square, London WC1A 2RA (GB).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),

[Continued on next page]

(54) Title: DEFENSIN PROTINS

Predicted nucleotide sequence of INSP108 with translation

```

1  ttgttccaaa aggttcacta gccatgcagc tcccgtcttc ttcaaagctg cggagagagt
61  gactctccga tgagtcacag ctgettcttt gctgattggt atggccacaa ggagcgtcct
                                     m a t r s v
                                     INSP108-F1
121  cttggccctc gtggtcctta acttactctt ctatgttcca ccaggtagaa gtggacccaa
    l l a l v v l n l l f y v p p g r s g p
181  tgtctacata caaaaaatct ttgcttcatt ttggcgactg caaggtactt gccggccaaa
    n v y i q k i f a s c w r l q g t c r p
241  atgtctaaaa aacgaacaat atcgtatctt gtgtgatact atacatttgt gctgtgtaaa
    k c l k n e q y r i l c d t i h l c c v
301  cccaaaatat ttacctatac tgactgggaa atagttgtga gtacctgaaa gctgttgctg
    n p k y l p i l t g k
                                     INSP108-R1
361  atttcctctg ggaaccacga tccctctcag ttgcaccatt cgattaaaac aatggcctta
421  gctatcagtg gttc

```

Position and sense of PCR primers →
Underlined: signal sequence

(57) Abstract: This invention relates to the novel proteins, termed INSP 108 and INSP 109, herein identified as members of the defensin family of proteins and to the use of these proteins and nucleic acid sequences from the encoding genes in the diagnosis, prevention and treatment of disease.

WO 2004/063219 A1



Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— *with international search report*

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.